## **Rocky Mountain**

**Administrative History** 



## **CHAPTER VIII:**

## THE COLORADO-BIG THOMPSON PROJECT

Efforts to develop Rocky Mountain National Park in order to fulfill increasingly its dual purpose of preserving its primitive state and yet making it attractive to visitors occasionally ran counter to the needs and interests of neighboring regions, if not also other government agencies. One such instance involved a project for transporting water from streams on the western slope of Colorado's mountains to the eastern slope, through the Park, thus making the Park serve a new and possibly conflicting purpose. Behind the project was the demand for additional water by eastern slope users and the Bureau of Reclamation, a powerful federal unit. The story of how the project came about and was carried through, despite objections of Park officials, is the story of the Colorado-Big Thompson enterprise, which received official approval in the latter 1930's, and is the theme of this chapter.

The need for securing transmontane water for use on Colorado's eastern slope became evident during the latter nineteenth century. The reason arose from the fact that normally, the western slope was blessed with ample snow or rainfall, while the eastern plains, where Colorado's largest cities had grown up and extensive agriculture had developed, was semi-arid at best and often drought-stricken. Moisture-laden winds heading east from the Pacific coast rise as they approach the natural barrier of the mountain. Chilled by freezing temperatures, particles of water vapor condense into rain. Once over the Continental Divide, however, the westerly winds spill into warmer zones where air-borne water revaporizes into particles too tiny to fall. [1]

As settlement progressed on the plains, farmers and their allies began to consider the possibility of diverting water from the western slope to augment their irrigation efforts. In 1889 the Colorado State Legislature voted \$25,000 "to find a route for bringing these waters across the mountains where they can be used." [2] Nothing positive came from this survey because a feasible route could not be found without building a three-mile tunnel through the mountains.

In 1904 the Bureau of Reclamation outlined a plan by which a large storage reservoir could be built on the Colorado River about twelve miles south of Grand Lake. The water from this reservoir would then be pumped up to Grand Lake and diverted through a long tunnel under the Divide to a point on the eastern slope near Estes Park. Engineering students of Colorado Agricultural College (now Colorado State University) surveyed this contemplated project in 1905. But no further steps were taken in connection with the project until the 1930's.

Just prior to that time, the Greeley Chamber of Commerce emerged as the leading representative of eastern slope irrigation interests. The Chamber's spokesmen endeavored to have reserved for Northern Colorado a portion of the water of the North Platte River when Congress was considering the Casper-Alcova project. [3] The project was finally authorized in July 1933, but without any reservation of water for transmontane diversion to northern Colorado. Hence the Greeley spokesman and their supporters were forced to seek some other source for supplemental water. They realized that their only hope lay in tapping the water of the Colorado River, and so they turned to the "Grand Lake Project," which would lie solely within the boundaries of Colorado. L. L. Stimson, W. R. Kelly, and Fred N. Norcross solicited the aid of Charles H. Hansen, head of the relief agencies in Weld County and editor of the Greeley Tribune to work for the project by obtaining a new survey. This group then interested the Weld County Board of County Commissioners in the project at two meetings in August of 1933. [4]

Meanwhile, O. G. Edwards, President of the Greeley Chamber of Commerce, had appointed a "Grand Lake Water Committee," with Norcross as Chairman. Others on the committee were C. G. Carlson of Eaton, Charles Swink of Milliken, Charles Hansen, Frank B. Davis, attorney William R. Kelley, Claude Carney, and Harry W. Farr, all of Greeley, and State Representative M. E. Smith of Ault, and County Attorney Thomas A. Nixon. This informal organization later became the Northern Colorado Water Users Association. Its purpose was to promote the project and to find financial backing for it.

A meeting of irrigation leaders from Weld, Larimer, and other counties was held at the Greeley Courthouse on August 17. There, Stimson and Burgis Coy, the latter a noted tunnel engineer from Fort Collins, declared that the proposed diversion tunnel was feasible. A separate meeting was later held with the Larimer County Commissioners. As a result of these meetings, the Weld County Commissioners agreed to advance \$2,000 for a survey, while Larimer County added \$700. A survey party, organized and led by Stimson, prepared to work on the Grand Lake side of the Park during the middle of the following September. They were directed to run lines for reservoirs and tunnels from Grand Lake. [5]

In seeking to carry out his duties, Stimson faced the opposition of the Park Service. Director Arno B. Cammerer rejected outright a request from Weld and Larimer county citizens for permission to make a preliminary survey in the Park for the proposed tunnel. To this decision, Secretary Harold Ickes added the full weight of the Interior Department when in a wire to Colorado Governor Edwin C. Johnson he advised that neither the survey nor the project would be allowed in the National Park. [6]

While the National Park Service recognized the need for water diversion, it believed that an alternate tunnel route could be found outside of the Park boundaries. It also believed any consideration of a tunnel in the Park had to be based on satisfactory answers to certain questions. Would not a tunnel drain the Park lakes by creating fractures in the underlying rocks? Would not such a project run counter to the basic philosophy of protecting this area from exploitation? Supporting the Park Service position were some of the older residents of Grand Lake who opposed the project for fear that the lake would be muddied by waters pumped there by the proposed storage reservoir. On the other hand, newer business interests

in the area welcomed the enterprise as an additional source of revenue.

At Grand Lake, Stimson's party was blocked from entering the Park by Chief Park Ranger John McLaughlin. Still, the eight-man survey party spent four days at Grand Lake and five days near Estes Park making the survey, though at no time setting foot inside the Park boundaries. Stimson made his survey by using the uplifted head of Hallet's Peak for a point from which to work on both sides of the Divide. He claimed he had located tentatively the eastern and western portals of the tunnel by triangulation. In the same way he made a profile of the whole operation. [7]

The proponents of the tunnel next sought federal financing for their project through the Public Works Administration (P.W.A). On Labor Day, 1933, attorneys Kelly and Nixon submitted a preliminary application from the county commissioners of Weld County to the Colorado P.W.A. This petition aroused resentment from the western slope over the distribution of public works money for water conservation projects. In late September, delegates from around the state gathered in the Denver office of George M. Bull, engineer with the state public works advisory board, to resolve these differences. James Quigg Newton, Denver investment broker, presided. After a day of wrangling it was decided to form a united front in an effort to get Colorado's share of the \$3,300,000,000 of P.W.A. funds set aside for public works in the United States.

The meeting was characterized by Congressman John Martin of Pueblo as "historic." The Rocky Mountain News claimed that it was the first instance in the state's history when irrigation men peaceably adjusted their differences. In fact, though, western slope delegates had agreed to cooperate only after northeastern Colorado representatives had approved the construction of a dam above Grand Lake to compensate that area for the loss of water through the proposed tunnel. [8] Yet not everyone west of the Divide was satisfied with this deal. A citizens group called the Grand County Natural Resources League was formed to combat any proposal that would drain Grand Lake in the interests of a diversion tunnel. The League promised to oppose the tunnel and "any other plan to divert water from the west side to the east side of the divide." [9]

In the meantime, proponents of the project tirelessly carried on their publicity campaign. Enthusiasts explained the project to irrigation groups in Greeley, Eaton, Fort Collins, Loveland, Longmont, Fort Morgan, and Sterling. In October 1933, Charles Hansen replaced Fred Norcross as chairman of the Special Grand Lake Project Committee. Norcross in turn became secretary of the Northern Colorado Water Users organization to push the diversion scheme.

Sharing in the effort were men outstanding in irrigation development in the Poudre, Thompson, lower St. Vrain, and lower South Platte rivers. Among these supporters were J. M. Dille, a leader in irrigation in the Riverside and Bijou areas at Fort Morgan; Robert J. Wright, a manager of the North Sterling and Prewitt projects at Sterling; Ed C. Munroe, of the North Poudre; and W. E. Letford, T. M. Callahan, and Ray Lanyon, of Longmont. Also included were James Stewart of the Platte Valley, Greeley, and Loveland systems; R. C. Benson of Loveland; C. M. Rolfson of Julesburg, Ralph McMurray of Fort Collins; Charles

A. Lory, President of the Agricultural College at Fort Collins; and Governor Edwin Johnson. [10]

After a year of promotional activities, that is by September, 1934, tunnel advocates had begun active negotiations with representatives of the Bureau of Reclamation. Charles Hansen and attorneys Kelley and Nixon met several times that fall with a Reclamation committee made up of Ray Walter, Chief Engineer; E. B. Debler, head of project investigations; and C. O. Harper, Assistant Chief Engineer of the Bureau. These negotiations were successful, for in the spring of 1935 the Reclamation Service agreed to make a survey for the project. A total of \$150,000 in government funds was allowed for the survey.

Not until the Reclamation Service had made application to undertake the survey did Park officials realize that the projected tunnel was to be driven through twelve miles of the most scenic part of the Park. Only then did they also learn that Grand Lake was to become a storage reservoir. Despite subsequent Park Service protests to the Secretary of the Interior, the Reclamation Service received authorization to proceed with its proposed surface and geological survey. [11]

By late February 1936 the Reclamation Service reported that its preliminary surveys indicated that the Grand Lake water diversion project was feasible from both engineering and economic considerations. [12] Shortly thereafter, the Estes Park Trail optimistically reported that construction work on the project seemed to have "slightly better than a 50-50 chance of getting started" later that year. [13] Though failing to get approval from the Budget Bureau for \$3,000,000 to start work, the project's proponents nevertheless worked for congressional authorization of the plan. They succeeded in obtaining a rider to the Interior Department appropriation bill which would have authorized construction of a Grand Lake-Big Thompson Inter-mountain Diversion Project, with plans for an electric power plant on the eastern side. The appropriation bill passed both houses of Congress, but had to be sent to a conference committee early in March.

Alarmed conservation-minded groups and individuals promptly sent protests to Secretary Ickes. One important protest, which was published early in April, was endorsed by thirteen national civic groups. In perhaps its most telling paragraph the protest read:

We submit that this project violates the most sacred principle of National Parks, namely, freedom from commercial or economic exploitations and that if approved by Congress it will establish a precedent for the commercial invasion of other parks. We urge the American people to rally to the defense of their National Park system and demand of Congress that this project be stopped. [14]

Not only was the end-result of the tunnel building considered deplorable, but the means to achieve that end seemed Machiavellian. The conservationists' protest also declared:

We submit that the Grand Lake-Big Thompson Intermountain Diversion

project included by the Senate on March 2 as a rider to the Interior Department Appropriation Bill, has not been adequately investigated, has not been approved by the Budget Bureau, and has not been considered by the appropriate committees in either house of Congress.

Moreover, the Congress by amendment to the Federal Power Act has enunciated the policy that National Parks should be exempt from power projects. The scheme . . . involves the development of power and the construction of unsightly power lines near the eastern and southern boundaries and across a scenic area which has long been contemplated for addition to the park.

In the building of the tunnel the disposition of debris will deface the landscape and leave a scar on the wilderness character of the park and its environs. We have no faith in promises to maintain the level of Grand Lake if water becomes needed for power or growing crops in dry years. [15]

Opposition also came from within the Colorado congressional delegation. The <u>Denver Post</u> warned of a possible "legislative civil war," led by Representative Edward T. Taylor, a champion of western slope interests. [16] Taylor became the spokesman for the House in the Senate-House Conference Committee. He objected to the bill first on the technical ground that new legislation was being proposed in an appropriation bill, and he complained that the Senate Appropriation Committee, by choosing to include the project in the Interior Department bill had ignored some fifteen smaller water projects on the western slope, which had been recommended by the State Planning Commission. [17]

Taylor also contended that the western slope would not be fully compensated for water that irrigation interests proposed to divert. For some time he had demanded that eastern slope water users support efforts for constructing on the western side of the Divide storage and power facilities equal to those for the eastern side. Incidentally, proponents of the diversion project held out for "adequate" rather than "equal" compensation. [18] Taylor also insisted that any diversion should be delayed until a survey of all water resources of the upper Colorado River Basin was completed, as provided under the Colorado River Compact. In the face of Taylor's opposition, Representative Fred Cummings of Pueblo struck back by contesting a million dollar item in the same Interior Department bill for an Indian irrigation reservoir on the Pine River in Taylor's district. [19]

In the midst of this acrimonious debate new pressures were exerted from the White House. President Roosevelt, concerned about "superfluous" federal spending in an election year, protested the package of reclamation projects, including the Grand Lake project. [20] After considerably more debate in both houses, the tunnel project was dropped in the final passage of the Interior appropriation bill on June 19. [21]

Numerous official and unofficial visitors to the Park that summer, however, gave evidence to the fact that the diversion project was not yet dead. Arriving in July were representatives of the Wilderness Society and the state planning board. Another group included

Congressman Cummings, Charles Hansen, editor of the <u>Greeley Tribune</u>, and Porter Preston and M. A. Bunger of the U. S. Reclamation Service. They were met in Grand Lake by Thomas J. Allen, Jr., the new superintendent of Rocky Mountain National Park, They inspected the site of the eastern outlet of the proposed diversion tunnel on Wind River and continued along the route for the water which would serve an electric power plant at the junction of the South St. Vrain and Big Thompson roads. At Grand Lake they inspected the sites of two proposed dams, and saw working models of devices to control the level of Grand Lake. They also surveyed several streams, the flow of which was essential to the diversion project. Upon his return to Fort Collins, Representative Cummings predicted that the project had "an excellent chance" of passing in the next session of Congress. [22]

Cummings' optimism did little to daunt the determined Taylor. He contradicted his fellow congressman by declaring:

I can assure you . . . that the house is not likely to approve any budget estimate for the Grand Lake-Big Thompson project at the next session. With approximately 300 house members present, an amendment to the interior bill to authorize the project received only two votes, Representative James P. Buchanan of Texas, chairman of the house appropriations committee, has joined me in warning the president that the project has no chance of approval. [23]

Indeed the President found himself, in the words of one newspaper, holding a political "hot potato" with respect to the diversion plan. Whether he supported the project or not he stood to lose votes in Colorado in the November Presidential election. He was also confronted with the news of a strong upswing for the Republican Presidential nominee, Alfred Landon, in the Centennial State. [24]

In October 1936 the <u>Rocky Mountain News</u> predicted that "Taylor still brandishes the club with which to knock the proposed item out of the interior department budget." [25] In his role as chairman of the subcommittee on Interior Department appropriations of the House Appropriations Committee, Taylor seemed to be an insuperable obstacle to obtaining House approval of the appropriation necessary for the project.

The chances for approval of the diversion project were brightened considerably, however, by President Roosevelt's overwhelming victory in the 1936 election. He then seemed ready to throw his support behind the project. The <u>Denver Post</u> predicted "the president's word is likely to be law with at least a majority of the overwhelming Democratic membership of the house." [26] Encouraged, the Reclamation Service began an intensive effort to secure public support for the project through newspaper articles and speeches. [27] Reclamation Commissioner John C. Page assured audiences that the project was not only feasible but also capable of repaying its cost "with entire certainty." [28]

On June 18, 1937, Senator Alva Adams of Colorado introduced in the Senate a bill to authorize the construction of the diversion project. The bill was approved, without opposition, first by the Senate Committee on Irrigation and Reclamation and then by the

Senate itself. Adams was confident of success as the bill was sent to the House. He told the Denver Post:

I think we have made some real progress toward launching this project. Even though the house should refuse final action on it at this session we have gone far enough to give substantial assurance of favorable action at the next session. [29]

The House Reclamation Committee hearings attracted a number of witnesses for and against the bill. Included among the opposition were A. E. Demaray, assistant director of the National Park Service; Dr. H. Dorsey Magee, vice president of the Izaak Walton League; Mrs. Dora Padgett, secretary of the American Planning and Civic Association; Robert Sterling Yard of the Wilderness Society; and Colonel Joseph I. Pratt of the North Carolina Forestry Association. These critics were dismissed by the <u>Denver Post</u> as "eastern 'nature lovers'." [30] Demaray argued that some other tunnel route should be followed even if it proved more costly. He then offered amendments to the bill to assure Rocky Mountain National Park both water and electricity from the project without charge to the government. His amendment would also require Park Service approval of all construction, parkways and the screening of debris.

A vehement Senator Adams charged Demaray with hypocrisy. In part he said:

When we first asked Mr. Demaray for his cooperation in getting a survey of the routes suggested for diversion of water from Grand Lake across the divide, he and other officials of the park service declared they would oppose all the routes . . . . Now he comes here asking why the other routes have not been surveyed. They were against the low level route south of the park because they said it would drain the lake. So partly because of their objections we concentrated on the high level route under the park.

Adams went on to assure the critics of the project that, "Not one inch of the surface of Rocky Mountain park will be touched by this project." [31]

To the people of Estes Park village the proposed reclamation project seemed to offer a way out of their depressed economic condition. The completion of the project would likely bring more people and more money to the village. By September of 1937, the Estes Park Chamber of Commerce had set machinery in motion to have the offices of the Reclamation Bureau in charge of the water diversion project located in Estes Park. [32] Glen Preston, president of the Chamber of Commerce, in a letter to the <u>Loveland Reporter-Herald</u> emphasized the support of his organization to the project.

At no time has the Estes Park Chamber of Commerce opposed the Big Thompson-Grand Lake diversion project. At all times have we realized its value to our valley neighbors and its potential value to us people in the mountain village. [33]

By November, much if not all of the project's opposition had been overcome. In a hearing in Estes Park on November 12, all of the Coloradans who testified approved the project. Among these were Senator Adams, Representatives Taylor, Lewis, and Cummings, President C. A. Lory of Colorado Agricultural College, Clifford H. Stone of the Colorado water conservation board, and L. H. Kittell, Secretary of the Chamber of Commerce; Kittell claimed to represent "every organized group in Estes Park." Telegrams approving the project were read from President A. Lincoln Fellows of the Colorado Forestry Association, the Colorado State Planning Commission, and the State Game and Fish Commission. Any criticism from conservationists was further diluted by a statement prepared by Arno B. Cammerer, which recognized the Reclamation Service's right to flowage waters and outlined a program to preserve the Park's beauty. [34]

During December, the House approved the Senate bill and President Roosevelt signed it on December 26. According to new Park superintendent David Canfield, Coloradans viewed the approval "with mingled feelings." Many remained skeptical even though Senator Alva Adams claimed that the project ranked in importance with the discovery of gold in the state and the construction of the first railroad. Canfield thought the majority of local people believed that the water would be worth any disfigurement of scenery. [35]

After the project was authorized, Congress allotted it an additional \$2,000,000, making a total of \$4,150,000 available for work the first year. Contracts were soon let by the Bureau of Reclamation for the construction of a Green Mountain Dam and reservoir on the Blue River, as well as approach roads to the east and west portals of the tunnel. In addition, construction work began on the building of headquarters, residential, and utility areas near Estes Park and Grand Lake villages. The architecture of these sites, though functional, resembled according to one observer, "a concentration camp." [36] Park Superintendent Canfield reported "intensive activity" on the whole project by May 1939. One of the most difficult features lay in boring the tunnel for carrying water from Grand Lake to a projected dam on the edge of Estes Park village.

Although work was seriously curtailed by World War II, water was delivered through the Alva Adams Tunnel on June 23, 1947. All authorized features of the project were completed in 1954. To avoid spoiling the beauty of Grand Lake by changing its level, the Bureau of Reclamation built Shadow Mountain Lake to the southwest on the same level as Grand Lake and connected to it. The water pumped from the Granby Reservoir now flows through Shadow Mountain Lake to Grand Lake and is then diverted by the Adams Tunnel through the mountains to Lake Estes near the Village.

The entire project was an impressive engineering feat. When the two tunnel crews finally joined the thirteen and one tenth mile Adams Tunnel, they found the horizontal alignment off by seven-sixteenths of an inch. The total error could have been covered by a twenty-five-cent piece. [37]

Has the project been a success? Facts seem to prove that it has been for eastern slope water users. In the severely dry year of 1954 the Grand Lake-Big Thompson project was credited with supplying 300,332 acre-feet of supplemental water and thereby being responsible for

over half of the \$41 million worth of crops grown that year.

Of greater importance for a study of the administration of the Park is the question of the effect of the project on efforts to preserve intact the natural features of the Park, in accordance with one of the major purposes for its creation. There is no doubt that Park Service officials opposed the proposal for constructing a water diversion tunnel within the Park's boundaries, both because they desired to avoid damage to the primitive environment and because they believed that an alternative route could be found. But they were overruled. Their concerns, however, caused the Reclamation Service to exercise great care in planning for and carrying out construction work, so that nature's setting was disturbed as little as possible and that necessary auxiliary features, such as Granby Reservoir and Lake Estes, were placed outside the Park's boundaries. Thus the practical needs of nearby water users resulted in only minor modifications of the Park's primitive character.

## **ENDNOTES**

- 1. "Water through the Rockies; Giant Colorado Tunnel to feed Arid Farms on Eastern Slope," <u>Newsweek</u>, December 15, 1941, p. 76.
- 2. "Piercing the Backbone of a Continent," <u>Industrial News</u>, March 1945, p. 1.
- 3. Fred N. Norcross, "Genesis of the Colorado-Big Thompson Project," <u>Colorado Magazine</u>, January 1953, p. 29.
- 4. Ibid., p. 30.
- 5. Ibid., p. 31.
- 6. Rocky Mountain News, September 16, 1933.
- 7. The Denver Post, October 1, 1933.
- 8. Rocky Mountain News, September 27, 1933.
- 9. Superintendent's Monthly Report, October 1933, "Monthly Reports, 1933," pp. 11-12. Rocky Mountain National Park Library.
- 10. Norcross, "Big Thompson Project," p. 32.
- 11. Superintendent's Annual Report, 1936, "Annual Reports, 1931-1953," p. 8. Rocky Mountain National Park Library.

- 12. Estes Park Trail, February 21, 1936.
- 13. Ibid., March 6, 1936.
- 14. Among the groups protesting the diversion project were: the National Association of Audubon Societies, the Izaak Walton League of America, the General Federation of Women's Clubs, the American Planning and Civic Association, the American Forestry Association, the Garden Club of America, the American Wildlife Institute, the National Parks Association, the Society of American Foresters, the American Association of Museums, the National Conference on State Parks, the Massachusetts Forest and Park Association, and the Wilderness Society. Science, April 24, 1936, p. 385.
- 15. Ibid.
- 16. The Denver Post, April 17, 1936.
- 17. Ibid.
- 18. <u>Denver News</u>, April 16, 1936.
- 19. The Denver Post, April 17, 1936.
- 20. <u>Denver News</u>, April 18, 1936.
- 21. Arguments for and against the diversion project can be found in: U. S., <u>Congressional Record</u>, 74th Congress, 2d Session, 1936, LXXX, Part 7, pp. 7611-7632.
- 22. Estes Park Trail, July 10, 1936.
- 23. The Denver Post, October 4, 1936.
- 24. Ibid.
- 25. Rocky Mountain News, October 12, 1936.
- 26. The Denver Post, November 8, 1936.
- 27. Superintendent's Monthly Report, November, 1936, "Monthly Reports, 1936-1937," p.
- 3. Rocky Mountain National Park Library.
- 28. <u>The Denver Post</u>, June 17, 1937.
- 29. Ibid., June 26, 1937.
- 30. Ibid., July 3, 1937

- 31. Ibid.
- 32. Estes Park Trail, September 17, 1937.
- 33. Letter of Glen Preston to <u>The Loveland Reporter-Herald</u> and printed in the <u>Estes Park Trail</u>, October 22, 1937.
- 34. Ibid.
- 35. Superintendent's Monthly Report, December 1937, "Monthly Reports, 1936-1937," pp. 11-12.
- 36. Ibid., March 1939, p. 1.
- 37. "Backbone of a Continent," p. 4. The Colorado-Big Thompson project was dedicated finally on August 11, 1956. Secretary of Interior Fred Seaton presided at the ceremonies.

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